

20000830.qrp v01_n929.qrl.20000830

Date: Wed, 30 Aug 2000 19:03:07 EDT

From: qrp-l@Lehigh.EDU

To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>

Subject: QRP-L digest 1929

QRP-L Digest 1929

Topics covered in this issue include:

- 1) [78387] PEP Measurement?
by "W7TRX" <w7trx@mindspring.com>
- 2) [78388] 80m QRP DXing
by John AE5X <ae5x@juno.com>
- 3) [78389] Re: Lost Data?
by "Anthony A. Luscre" <aluscre@neo.rr.com>
- 4) [78390] Trade photo equip for all-mode, all-band rig
by Marty <N5NW@midsouth.rr.com>
- 5) [78391] Solder Station
by "Karl F. Larsen" <k5di@zianet.com>
- 6) [78392] TT II Skeds Tonight?
by "Steve McDonald" <jsm@gulfislands.com>
- 7) [78393] Re: Smallest antenna used to set KM/watt Record?
by S LYON <sslyon@worldnet.att.net>
- 8) [78394] crippled fox
by David Heintzleman <pstrdave@kdsi.net>
- 9) [78395] Crippled Fox Hunt
by ARDUJENSKI@aol.com
- 10) [78396] Re: crippled fox
by "KC1FB" <kc1fb@optonline.net>
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by hamjoel@juno.com
- 12) [78398] An Elmer Story (LONG)
by Mike Pupeza <mpupeza@altavista.com>
- 13) [78399] Re: Thermoelectric powered radio
by Stephen Trier <sct@po.cwru.edu>
- 14) [78400] Thermoelectric powered radio
by David Sarraf <david.sarraf@paonline.com>
- 15) [78401] Re: Thermoelectric powered radio
by "Chris W4YYZ" <w4yyz@tampabay.rr.com>
- 16) [78402] Re: 80m QRP DXing
by Dave Sjolin <sjolin@swbell.net>
- 17) [78403] QRP Rigs for sale/ update
by Scott Bauer <w3cv@pcbank.net> (by way of Scott Bauer <w3cv@pcbank.net>)
- 18) [78404] Jims QRP Question
by "TC Dufresne" <tdufres@radiks.net>
- 19) [78405] Re: ANTS. Challenger 25 foot counterpoises

- by "Stuart Rohre" <rohre@arlut.utexas.edu>
- 20) [78406] NCJ Contesting for Fun column
by Bob Patten <n4bp@bc.seflin.org>
- 21) [78407] Re: 80m QRP DXing
by "Pastor-KC1DI" <elbc@pivot.net>
- 22) [78408] Fw: ANTS. Challenger 25 foot counterpoises
by "Walter D Amos" <waltk8cv@surfree.com>
- 23) [78409] Re: Thermoelectric powered radio
by David Hinerman <dlh1009@ritvax.isc.rit.edu>
- 24) [78410] Re: 80m QRP DXing
by "Karl F. Larsen" <k5di@zianet.com>
- 25) [78411] FS: K2
by k8ff@juno.com
- 26) [78412] Re: WTB: QRP Classics (Got one)
by "Ron White" <rwhite@netins.net>
- 27) [78413] Re: System noise and very low noise receiver testing
by "Lau, Zack, W1VT" <zlau@arrl.org>
- 28) [78414] Manhattan Construction
by "Cla KA0GKC" <ka0gkc@arrl.net>
- 29) [78415] RE: Thanks...and another question!
by "AI2Q Alex" <ai2q@ispchannel.com>
- 30) [78416] SMK1 Wowzers
by "Steve Sorrell" <ap036@detroit.freenet.org>
- 31) [78417] Re: Manhattan Construction
by David Hinerman <dlh1009@ritvax.isc.rit.edu>
- 32) [78418] Michigan QRP Net
by ekwik@rtimail.com
- 33) [78419] Re: Contest: CQC QSO Party Results - K7RE
by Brian Kassel <bkassel@dancris.com>
- 34) [78420] Re: Manhattan Construction
by "George Heron N2APB" <n2apb@erols.com>
- 35) [78421] Selling QRP
by "Karl F. Larsen" <k5di@zianet.com>
- 36) [78422] OT PROBLEM -THANKS
by M Goins <mgoins@usa.net>
- 37) [78423] Re: Manhattan Construction
by Bruce Muscolino <w6toy@erols.com>
- 38) [78424] psk question
by M Goins <mgoins@usa.net>
- 39) [78425] Michigan QRP Net correction
by ekwik@rtimail.com
- 40) [78426] Re: Manhattan Construction
by "Cla KA0GKC" <ka0gkc@arrl.net>
- 41) [78427] ZAKANAKA help
by M Goins <mgoins@usa.net>
- 42) [78428] Re: psk question
by "laura halliday" <marsgal42@hotmail.com>
- 43) [78429] Re: ANTS. buried coax, even direct burial type will not last as long

as you might want

by "Stuart Rohre" <rohre@arlut.utexas.edu>

44) [78430] Crystals from MH Electronics

by "Steve McDonald" <jsm@gulfislands.com>

45) [78431] Re: TT II Skeds Tonight?

by "Bob Tellefsen" <n6wg@earthlink.net>

46) [78432] On-Line QRP Publication (September)

by Doug Bankston <dougbankston1@yahoo.com>

47) [78433] 8.0QRPC: comments

by mike.mhe@t-online.de (Michael Haugrund)

48) [78434] Re: ANTS. buried coax, even direct burial type will not last as long
as you might want

by Steve Yates <aa5tb@yahoo.com>

49) [78435] Fox: Results after Hunt 16, and commentary

by "Marshall Emm" <mgemm@mtechnologies.com>

50) [78436] FOX: Results after Hunt 16 (data)

by "Marshall Emm" <mgemm@mtechnologies.com>

51) [78437] wow! nc20 mojo

by "Rod, N0RC" <n0rc@qsl.net>

52) [78438] OT TCP/IP and Windows HyperTerminal

by GUARDM@aol.com

53) [78439] Re: ANTS. buried coax, even direct burial type will not last
as long as you might want

by "Chuck Carpenter" <w5usj@globeco.net>

54) [78440] Re: OT TCP/IP and Windows HyperTerminal

by "Manager QRP-L" <manager@astro.cc.lehigh.edu>

55) [78441] Re: Thermoelectric powered radio

by Bill Coleman AA4LR <aa4lr@radio.org>

56) [78442] Re: Thermoelectric powered radio

by Bill Coleman AA4LR <aa4lr@radio.org>

57) [78443] NorCal's September Meeting this Sunday

by Jerry Parker <jparker@fix.net>

58) [78444] sfox thursday

by Valeriy Agabekov <wj1r@chisp.net>

59) [78445] Re: Manhattan Construction

by n5ib@juno.com

60) [78446] Re: Another great tool, the ESR

by "Rick Austin" <radio@capsales.com>

61) [78447] Ham Exams

by hattonte@gdls.com

62) [78448] Re: Manhattan Construction

by Tom and Roxy <zikot@erie.net>

63) [78449] Re: Manhattan Construction

by "David Porter" <dporter@voicenet.com>

Date: Tue, 29 Aug 2000 16:06:04 -0700

From: "W7TRX" <w7trx@mindspring.com>
To: "QRP-L Discussion" <qrp-l@Lehigh.EDU>
Subject: [78387] PEP Measurement?
Message-ID: <001a01c0120d\$b6017ec0\$af2079a5@fkxug>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Greetings,

I am setting up my IC-706IIG to run SSB QRP on 6m. I am in need of information to properly measure PEP. My many radio books have definitions of PEP, but not adequate information regarding proper measurement with a SWR/POWER meter.

When I first enquired about running SSB QRP, I received several helpful answers, but the measurement methods do not agree with each other.

First I tried setting the radio to FM, then keyed the mic (no modulation) and adjusted for 10w with the Diamond SX-200 meter in the PEP position. Now switching back to USB, when I talk, the meter only shows 2-4 watts at the peaks of my voice.

I tried whistling and setting for 10w. This same setting only gives me 5 watts when I use the loud "oooooooooooooooooooo" method recommended by another.

How do I get a reasonably accurate PEP measurement with my existing equipment?

Thanks, TR
W7TRX

Date: Tue, 29 Aug 2000 20:16:40 -0400
From: John AE5X <ae5x@juno.com>
To: qrp-l@lehigh.edu
Subject: [78388] 80m QRP DXing
Message-ID: <20000829.201641.13974.0.ae5x@juno.com>

Hello,

Anyone out there actively chasing DX on 80m while QRP? If so, I'm interested in what type of antenna you use and whether you've had much

success with it as far as DXing. I'll be moving soon and have never (in 22 years of being a ham!) been on 80m and would like to try it this winter but need to decide on an antenna.

Thanks and 72,

John Harper, AE5X
HW-9, OHR-100A/20, NC40A, SST/30, SST/40, DSW/20
Outdoor QRP <http://www.qsl.net/ae5x>

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<http://dl.www.juno.com/get/tagj>.

Date: Tue, 29 Aug 2000 20:20:11 -0400
From: "Anthony A. Luscre" <aluscre@neo.rr.com>
To: k3chp@erols.com
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [78389] Re: Lost Data?
Message-ID: <20000830002053.AAA21510@roadrunner.neo.lrun.com@neo.rr.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Lotus Approach can open dbIII files (along with many other types) and runs under Win 95/98. You can buy previous version of Lotus Smart Suite containing Approach for \$10.00 plus shipping at Electro Mavin <http://mavin.com/computersoftware.html>
Plus you will get many more features plus 123 spreadsheet, wordpro word processing, freelance graphics, screen cam, etc.

Joe Mikuckis wrote:

> Several years ago, using dBase III, I created a database for all my QRP
> QSOs on 3.5-inch floppies. This represented over four thousand contacts
> and involved quite a bit of work. Now, while trying to update it, I
> find that it does not work with WIN98. What to do? Is there a present
> program which will allow me to run and use dBase III? I hate to lose
> it. Any help will be very much appreciated.
>
> Joe, K3CHP
> Riverdale, MD

--

|-----|
Anthony A. Luscre
K8ZT
Stow, Ohio
|-----|

Date: Tue, 29 Aug 2000 19:23:44 -0500
From: Marty <N5NW@midsouth.rr.com>
To: qrp-l@Lehigh.EDU
Subject: [78390] Trade photo equip for all-mode, all-band rig
Message-ID: <qukoqs4d9qs62ois5r919rjoho9nvtt5uj@4ax.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: quoted-printable

I'm looking for an HF/VHF/UHF combination radio, like the IC-706MkIIIG or =
Yaesu
=46T-847. I'd like to trade photo equipment for this radio, if possible.=
I
have a complete Minolta 600si outfit, with bag, professional tripod, =
flash,
three quality lenses, etc. Email for details if interested.

Will consider sale outright of photo equipment.

--

Marty, N5NW

-----=

Lakeland (Memphis), Tennessee =
<http://marty.w.tripod.com/>
N5NW@midsouth.rr.com

Date: Tue, 29 Aug 2000 18:41:17 -0600 (MDT)
From: "Karl F. Larsen" <k5di@zianet.com>
To: QRP-L List <qrp-l@lehigh.edu>
Subject: [78391] Solder Station
Message-ID: <Pine.LNX.4.10.10008291832520.1607-100000@cannac.ampr.org>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

If you plan to do any kit building your going to need a real good solder station. Weller makes a bunch that are fine but cost \$200-400. I happened to be looking and Weller has a new model with the Mouser part number of 578-WES50 which sells for \$115.00.

It looks at least as good as the expensive models. I went to the Weller web page and got the .pdf pages and they sell me on this as the best buy. Check it out.

Yours Truly,

- Karl F. Larsen, k5di@arrl.net (505) 524-3303 -

Date: Tue, 29 Aug 2000 17:49:08 -0700
From: "Steve McDonald" <jsm@gulfislands.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [78392] TT II Skeds Tonight?
Message-ID: <000701c0121c\$1e49a120\$4d11f4cc@jms>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Looking for skeds with the Tuna Tin tonight (40m)....any takers?
Looking especially for UT, NV, WY but will happily run with anyone interested!

Steve / VE7SL (CN88)

Date: Tue, 29 Aug 2000 21:30:48 -0400
From: S LYON <sslyon@worldnet.att.net>
To: zlau@arrl.org
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [78393] Re: Smallest antenna used to set KM/watt Record?
Message-ID: <39AC63C8.BC4F5B3A@worldnet.att.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

O.K. Zack... just give us a few hints as to how to load a 5.76 mHz horn on 40 meters -we'll jump right on it!

72

-s-

"Lau, Zack, W1VT" wrote:

>

> Has anyone experimented with using tiny antennas to qualify for the
> ARCI KM/watt award? I used a little 5x6x7 inch horn to set the
> 5760 MHz record. I should have brought a 30 dB attenuator--my
> 155uW SSB signal was actually 58! (from Mt Wachusett to Woburn
> MA, 36 miles).--Zack W1VT

--

'Seab' Lyon - AA1MY
Beacon NY USA FN-31
QRP-L 574 ARCI 9253

Date: Wed, 30 Aug 2000 02:11:36 +0100
From: David Heintzleman <pstrdave@kdsi.net>
To: qrp-l@Lehigh.EDU
Subject: [78394] crippled fox
Message-ID: <39AC5F48.B177EC55@kdsi.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Spent first 45 minutes of Alan's scheduled time on 40 mtrs this evening,
never heard ANYONE, fox or hound, except for two "9's" having qso up
freq a bit.

Got called away from shack for the 20 mtr allotted time.

Alan, ya got my permission, do it again and thanks for what you do.

Dave K8BBM

Date: Tue, 29 Aug 2000 22:32:14 EDT
From: ARDUJENSKI@aol.com
To: qrp-l@lehigh.edu
Subject: [78395] Crippled Fox Hunt
Message-ID: <54.8ba05fa.26ddcc2e@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

It was a strange nite for propagation. I kept checking to see if the antenna

was still attached and then a strong signal comes in out of nowhere. The results were as follows:

40M--0000-0100Z

KC7ZMN	599/599	WA	GUY
W6ABC	449/439	CA	JACK

20M ---0105-0200Z

K0EVZ	599/589	ND	DOC
KC1FB	579/579	CT	JIM
NW7DX	599/579	WA	BEN
AGOT	449/559	ND	TODD
AJ4AY	?		

And yes the weekly tuner-up-er. 14.050 must be the international tune up frequency (smile)

The names were put in a hat and Ben, NW7DX won the draw and gets the dozen QRO cookies. XYL will be baking this weekend!

Well the Crippled Fox limps off into the sunset. It has been fun and glad some of you got your first pelt. QSL cards are going out end of the week (fox ones).

73s Alan KB7MBI

Date: Wed, 30 Aug 2000 02:44:15 -0400
From: "KC1FB" <kc1fb@optonline.net>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [78396] Re: crippled fox
Message-ID: <000a01c0124d\$b727e240\$1600a8c0@tp760e>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I too spent awhile on 40 listening, without much hope at that hour from the right coast, and heard two "9's" in qso....and not much else.

Then, about 01:08 UTC went looking on 20 and right away found Alan with a BIG signal into CT, just under 14.051 and got that ol' Crippled Fox with one shot. Better than I do most times on the Summer Fox.

Nice going Alan.

Jim Francoeur KC1FB QRP-L #29

Norwalk, CT

-----Original Message-----

From: David Heintzleman <pstrdave@kdsi.net>

To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>

Date: Tuesday, August 29, 2000 10:26 PM

Subject: crippled fox

>Spent first 45 minutes of Alan's scheduled time on 40 mtrs this evening,
>never heard ANYONE, fox or hound, except for two "9's" having qso up
>freq a bit.

>Got called away from shack for the 20 mtr allotted time.

>Alan, ya got my permission, do it again and thanks for what you do.

>Dave K8BBM

>

Date: Tue, 29 Aug 2000 21:47:43 -0400

From: hamjoel@juno.com

To: qrp-1@lehigh.edu

Subject: [78397] Re: 80m QRP DXing

Message-ID: <20000829.225115.-216029.0.hamjoel@juno.com>

MIME-Version: 1.0

Content-Type: text/plain

Content-Transfer-Encoding: 7bit

On Tue, 29 Aug 2000 20:16:40 -0400 John AE5X <ae5x@juno.com> writes:

> Anyone out there actively chasing DX on 80m while QRP? If so, I'm
> interested in what type of antenna you use and whether you've had ...

hIGH John

here is what I done on eighty.... I had trees in good places and enough
room to put up a forty meter dipole ... soooo

I strung my eighty meter dipole out as far as I could and let the ends
drop,,,,,,

28 feet in front of that dipole I put a director (6 percent shroter)
between the ropes and trees and let the ends drop also...

A two element yagi for eighty...

Then I ran (at five watts) slow scan tv to a sstv repeater on 3.863 over
in newfoundland.... didn't keep the ant up long however I worked into
newfoundland lots more betterer than with the dipole...

did a three element wire / rope ant on forty and pointed it towards
europe and had no trouble crossing the pond... same on twenty....

Look at ur trees and draw a map of what u got to work with and then use
ur imigation with wire & rope and don't be afraid to be

unconventional... a good rod and reel or sling shot will get u very far....
ke1la joel
in maine

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<http://dl.www.juno.com/get/tagj>.

Date: 29 Aug 2000 20:36:21 -0700
From: Mike Pupeza <mpupeza@altavista.com>
To: qrp-1@lehigh.edu
Subject: [78398] An Elmer Story (LONG)
Message-ID: <20000830033621.705.cpmta@c012.sfo.cp.net>
Content-Type: text/plain
Content-Disposition: inline
Mime-Version: 1.0

An Elmer Story;

Fellow Hams,

In Toronto, Ontario, Canada, in 1958, as a High School student in grade 11(Harbord Collegiate Institute), I was interested in Electronics, and was a member of the Signal Corps, which was a section of the Army Cadet Corps.

In those days of the The Cold War , in Canada, all able male students were members of the Cadets , and we were required to participate in some aspect of Army potential career. Those with interests chose Bugle Band, Colour Party, Sharpshooting, First Aid, Precision Team (Marching), or Signals. (Others just got to practice to march for the yearly Inspection).

Out of the blue, my previous year s Science Teacher, Stan Dane, VE3PB, offered to teach me, and another student, the Morse Code , so that we could take the test and become Amateur Radio Operators!

Wow! I took the offer and we spent many evenings learning the code. His wife, Muriel, would serve us hot chocolate after our lessons during that winter period.

It took another 2 years before I was confident enough to take the Electronics and Code test, and I became a Ham in December of 1960. I felt that I was a disappointment to Stan, because of the 2 years, but I did it!

I became VE3EQP, and needed a transmitter! I had an old BC-454 (modified) as a receiver, so Stan lent me a homebrew 6V6, 6L6 VFO-Xmtr, and a Vibroplex Bug!

I used an end fed 66 foot wire, and worked many stations on 40M with about 15W.

I then bought a used DX-20 so returned Stan s rig!

Years went by MANY.

In the late 1980 s I met Stan again at a meeting of our South Georgian Bay Amateur

Radio Club! What a surprise! Stan retired from teaching in 1968 at age 60 still VE3PB!

He has lived up in the Midland, Ontario area since the 80 s and was active on CW all the while!

As he and Muriel have aged, he has shut down his station. He gave me his old home-brew systems, and in 1994, I made a final CW contact with him. I was using his original 1950s old 3 tube regen receiver, and the SAME transmitter he had loaned me back in 1960! WOW! I did have to spend 5-6 hours to get the old system to work several caps had dried up , and the cans and key had to be floating from ground (Safe, eh?). I have it to this day!

I also have his old log books, and if you contact me I can find out if you worked him!

Stan has given up his Ham Stuff, and lives with Muriel in a Retirement Home in Midland Ontario. He is 92, and Muriel is 93. I see him occasionally, but still picture him puffing his pipe and sending code at me back those many years.

Stan worked on CW only, with QRP, or slightly above (usually 15W), all of his time. He had worked just under 200 Countries (He was never a Dxer!) but many, many thousands of stations since 1936.

If you have worked him, over the years, or think you have, please contact me. I will check, and then drop in on Stan and tell him of the stations that I have heard from.

Thank you, and sorry for the Bandwidth.

72, 73

Mike Pupeza VE3EQP

mpupeza@altavista.com

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Date: Tue, 29 Aug 2000 23:45:07 -0400
From: Stephen Trier <sct@po.cwru.edu>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [78399] Re: Thermoelectric powered radio
Message-ID: <3.0.6.32.20000829234507.00a001d0@pop.cwru.edu>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

At 06:33 PM 8/29/2000 -0400, Chris W4YYZ wrote:

>Peltiers are inefficient when cooling/heating, and even more so when
>used for power generation.

Yep. Randy Heisch reported 0.35% efficiency with a 20 degree F differential. With a "near optimum load", the output power was roughly 0.5V at 125mA. That's interesting to compare to the 0.6V at 100uA in the encyclopedia article Greg scanned. 30 years begat 30 dB more (DC) power. ;-)

Stephen

--

Stephen Trier KG8IH "File names are infinite in length where
sct@po.cwru.edu infinity is set to 255 characters."
 -- Peter Collinson, "The Unix File System"

Date: Tue, 29 Aug 2000 23:41:39 -0400
From: David Sarraf <david.sarraf@paonline.com>
To: Greg Weinfurtner <weinfurt@oak.cats.ohiou.edu>
Cc: qrp-1@Lehigh.EDU
Subject: [78400] Thermoelectric powered radio
Message-ID: <39AC8273.6819B9F7@paonline.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Greg:

Your web article brought back fond memories - I won a set of World Book encyclopedias in a science fair and that set included the plans to make the candle-powered radio.

Your web page notes mentioned materials for the wires. Use standard thermocouple pairs such as Type K (chromel/alumel), Type T (copper/constantan) or type J (...../???) . Once source is Omega Industries in Stamford CT. Since you don't care about accuracy buy extension quality wire rather than thermocouple quality wire because it is less expensive. If anyone is interested I can send them a few feet of wire. We throw away lots of it away where I work because it is cheaper to use new than to salvage old. Don't hesitate to ask but I would appreciate a stamp or two and an address label if you do want some wire.

I question twisting the wires together as shown in the encyclopedia article. Every place that the wires touch creates a junction, so current could flow in a loop between the hot junction and the nearest twist rather than from the hot junction to the cold junctions at the far ends of each wire. This would greatly reduce the already low output of the device. Instead spread the wires so they don't touch. Soldering is

ok for the cold junction. Rosin flux will not be aggressive enough to clean the chromel and alumel wires. The best way to bond the hot end would be by spot welding. This creates a reliable joint without the concern of the candle flame evaporating lead from the solder and dispersing it into the air. Twisting would work for a quick test but the wires would soon oxidize and make a bad connection.

Thermionic and thermoelectric converters are rather old devices. They were studied extensively in the early 1960's but fell from fashion when fuel cells began to improve. About every 15 years the idea is resurrected and studied again using new materials or new geometries. The major attraction of these converters is silent and passive operation and the ability to utilize waste heat from combustion or other processes. Their efficiency is not very high but in some situations the advantages are too great to ignore. They have been used on some spacecraft to convert decay heat from bricks of radioisotopes to electricity. With no moving parts this power source is highly reliable. Several organizations have used them to make electricity in the field using either waste heat recovered from turbines or directly heated by some source of external combustion. Such generators are versatile, reliable, and nearly silent.

Most recently TPV is making inroads. TPV, or thermophotovoltaics, uses photocells to convert heat to electricity. The source or emitter operates between 900 and 1700 C. The light emitted by the source (visible or infrared) falls on cells whose bandgap is tuned to the incident wavelength. Systems having efficiencies comparable to internal combustion or power plants have been demonstrated, and a few companies are planning camp stove or lantern-type generators for the backpacker industry. A few years ago JX Crystals demonstrated a miniature system that powered a transistor radio from a candle flame and a larger system that ran a portable TV set from a propane flame. A company in New England was working toward a gas home furnace that used some of the heat to make enough electricity to power pumps and blowers to make the furnace completely self-powered.

All of this does have some applications to QRP. The encyclopedia article shows that it is possible to power a radio from a candle, and if changes were made I would expect that you may even power a transmitter. A lesson to be learned from the TPV folks is that the efficiency of most PV cells rises quickly if the light is concentrated. Try adding reflectors to solar panels to increase their output. They also learned that efficiency falls with rising temperature, so make sure that the cells are well-cooled if you do try this. Do this by adding fins to the back of the panel; a fan would most certainly be counterproductive.

Dave Sarraf
N3NDJ

Date: Tue, 29 Aug 2000 23:58:40 -0400
From: "Chris W4YYZ" <w4yyz@tampabay.rr.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [78401] Re: Thermoelectric powered radio
Message-ID: <00f701c01236\$95726510\$16f5a118@screamer>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

> At 06:33 PM 8/29/2000 -0400, Chris W4YYZ wrote:
> >Peltiers are inefficient when cooling/heating, and even more so when
> >used for power generation.
>
> Yep. Randy Heisch reported 0.35% efficiency with a 20 degree F
differential.
> With a "near optimum load", the output power was roughly 0.5V at 125mA.
> That's interesting to compare to the 0.6V at 100uA in the encyclopedia
> article Greg scanned. 30 years begat 30 dB more (DC) power. ;-)
>
> Stephen

It takes the TEC on my computer ~10A@15V to get a 60°C dT
and any more Voltage added reduces that amount. I use a copper
waterblock with a 700GPH water pump, pumping 10°C water through it.
The TEC is rated with a dT of 72°C.

Date: Tue, 29 Aug 2000 22:51:31 -0500
From: Dave Sjolín <sjolin@swbell.net>
To: ae5x@juno.com
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [78402] Re: 80m QRP DXing
Message-ID: <39AC84C3.FFDC0118@swbell.net>
MIME-version: 1.0
Content-type: text/plain; charset=us-ascii
Content-transfer-encoding: 7bit

John AE5X wrote:

> Anyone out there actively chasing DX on 80m while QRP? If so, I'm
> interested in what type of antenna you use and whether you've had much
> success with it as far as DXing. I'll be moving soon and have never (in
> 22 years of being a ham!) been on 80m and would like to try it this
> winter but need to decide on an antenna.

John, you sure are looking for a challenge. DX comes much more slowly on 80 meters than on the higher bands, even 40 meters. If you are going to use qrp to work 80 meter dx, then you will need to erect a good antenna and learn all you can about gray line propagation.

You will find that signals are dramatically stronger during the half hour to hour before sunset and after sunrise. At qrp levels you will need this boost to make it through the higher level of qrn found on this band. (hint it works at best ends of the path so as Europe approaches their sunrise, signals will grow in strength).

As far as an antenna, I use a vertical with a good ground system and have worked DXCC on 80 meters. I will admit that most of this DX was worked at the 600 watt level. But much of the DX, itself, was using 100 watts and their signals were easily Q5.

You might also consider a loop or if you have a tower, slopers. The utility of dipoles and other horizontally polarized antennas will be dependent on how high you can get them. Unless you are in the NE USA, I think you need to get the antenna up 60 feet to have a shot at consistent dx on 80 meters at the qrp level.

To rapidly increase your country count on 80 meters, be sure to operate in the the CQ World Wide DX contest and the ARRL DX contest. At these times you will find many stations active and many will be relatively easy to work because they are in the Caribbean. The CW portions of these contests will be particularly fruitful on 80. I would recommend going to 80 meters early in the evening to work the caribbean and South American stations. Later in the evening when the higher bands have closed you will find a lot more competition for these nearby countries. Assuming propagation is consistent, you will stand a better chance at working the Dx the second night after all the KW's have had their shot.

Have fun
73 de Dave, N0IT

Date: Wed, 30 Aug 2000 00:17:16 -0400
From: Scott Bauer <w3cv@pcbanc.net> (by way of Scott Bauer <w3cv@pcbanc.net>)
To: qrp-1@lehigh.EDU

Subject: [78403] QRP Rigs for sale/ update
Message-ID: <4.2.0.58.20000830001248.00988dc0@mail.pcbank.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

Well, this is what is left from my shack cleaning. The S&S gear is a steal at the prices I am asking

>>The following items are for sale and in "as new condition".
>>The price includes shipping in the U.S.A. via Priority mail. All items
>>work as specified and are in mint condition unless noted.
>>
>> Everything is on first come, first served basis. I would appreciate
>>money orders only since I have so much to sell.
>>
>>S&S ARK-20 20 meter CW XCVR with built in keyer. Has front firing
>>speaker, RIT, audio filter. Heavy extruded aluminum cabinet.
>> Aligned and tested at S&S Labs.
>>\$150.00 shipped
>>
>>S&S ARK-30, 30 meter CW XCVR with built in keyer. Has front firing
>>speaker, RIT, audio filter. Heavy extruded aluminum cabinet.
>> Aligned and tested at S&S Labs.
>>\$150.00 shipped
>>
>>S&S ARK-40, 40 meter CW XCVR with built in keyer. Has front firing
>>speaker, RIT, audio filter. Heavy extruded aluminum cabinet.
>> Aligned and tested at S&S Labs. Small
>>nick on the upper right front panel.
>>\$150.00 shipped
>>
>> S&S TAC-1, 40 meter CW XCVR with built in keyer, digital display,
>>RIT, audio filter and a variable power output mod done at S&S Labs.
>>Factory cabinet.
>>Aligned and tested at S&S Labs.
>>\$150.00 shipped
>>
>> S&S TAC-1, 80 meter CW XCVR with built in keyer, digital display,
>>RIT, audio filter and a variable power output mod done at S&S Labs.
>>Factory cabinet.
>>Aligned and tested at S&S Labs.
>>\$150.00 shipped
>>
>> Emtech NW 30 meter CW XCVR. Has audio filter, variable bandwidth
>>and RIT. Factory cabinet.
>>\$80.00 shipped

>>St. Louis Tuner from Nor Cal. Works but never modified. Cabinet painted
>>and has some nicks and scratches and chips.
>>\$40.00 shipped.
>> All have manuals.
>>
>> Scott Bauer, W3CV

Date: Mon, 28 Aug 2000 23:44:19 -0500
From: "TC Dufresne" <tdufres@radiks.net>
To: <qrp-1@Lehigh.EDU>
Subject: [78404] Jims QRP Question
Message-ID: <00cd01c01173\$cc736640\$87f31dce@server>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Jim says "Tom.....sounds like you finally got the 15 meter rig running.
What kind of problems did you have to solve before it would
finally work?"

Thanks Jim! Problems were many. Here's a partial list..

1) Need a circuit board. Need to make one

Must read up on PCB making. Search internet for info and read voraciously.
Learn about making PCB boards from transfers from ARRL handbook onto clear
"overhead" transparencies. Excellent! Purchase etching material, learn how
to etch PCB's. Isn't it neat to see the traces develop practically in front
of your eyes? Ahh, don't remove the copier ink from the etched board until
you drill it! Easier to line up the reverse if its a two sided PCB! (It
was). PS-- Far Circuit makes a lot of ARRL PCB's!!! Wow! learning so much
already!

2) Must get parts. Radio Shack people don't have anything like MRF 472's,
torroids, or low value resistors. OK, look on internet for electrical hobby
suppliers. Can you say Ocean Electronics? Its funny, when I placed one of my
several orders, the guy who took my order (Frank-great guy..) had all my
info ready to go! Mouser is good also.

3) Didn't really understand schematics, ie, why I needed a "shunt resistor".
Solution? you guessed it, my friends on QRP-L. Cool, now I understand... But
why do I need a "large value resistor, 1 watt value" for the shunt? Now I
know!

4) How to hook up/mate a Vernier dial to old 265 pF air cap? Now I know! I
had to build a "housing" so the air capacitor could be bolted on and the
Vernier dial could be flush mounted on the front of the rig.

- 5) Exactly how does a 3TDP switch work? I had three switches, and had to hook up antennas, power, grounds and more to 1 single pole, 1 dual throw, a double pole double throw, and the 3TDP. Problem solved!
- 6) The schematics gave me fits. Had much questions about them , and had to spend hours trying to reason them out. Finally realized, for instance, that yes, the darn oscillator circuit was SUPPOSED to be on at the same time as the PA during sending. I know, sounds basic, but remember, newbie on board here!
- 7) The problem with just the oscillator working, no power to amp. I tried everything. Replaced 'pert near everything, then at my wits end, looked under the PCB and saw not one, but TWO areas where the traces had lost continuity! Fixed, making a mental note that next time I will ALWAYS make sure traces are intact BEFORE replacing all components one by one!
- 8) Trying to hook up PCB back into rig AFTER I had already made drill holes, placed standoffs, and R/R parts. Solution: careful soldering! Honed those skills MUCH earlier in the game!
- 9) Trying to be able to test RF output. Solution, look on internet, find neat RF probe under NJQRP website for "Less than \$10" Actually, it cost much more than ten bucks, but it was fun to build. It may not be perfectly accurate, but it works for me!
- 10) Lastly, and finally, being able to solve the filter problem. Lots of RF power into Chebechev (sp) filter, almost NONE into antenna.. WHY?!?!?! This I think was the most frustrating. I don't need to remind you how many times I checked for continuity, resoldered, etc before someone said "I might try and take a few turns off the last two coils in the circuit" Bingo! I have a radio!

So, Jim, in a large post, I hope I have answered your question. Best to you
es yours,

Tom

PS, I have a feeling you MAY have not seen the last of me! (wink)
KC0GXX

Date: Wed, 30 Aug 2000 02:10:32 -0500
From: "Stuart Rohre" <rohre@arlut.utexas.edu>
To: <qrp-1@Lehigh.EDU>
Subject: [78405] Re: ANTS. Challenger 25 foot counterpoises
Message-ID: <00d401c01251\$62feca90\$5ac07481@rohredt2000>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

On the GAP Challenger, they are radiating parts of the antenna and that is what I call a counterpoise. There must be three of them. Each must be 25 foot and not buried for efficiency of the antenna to. They can be arranged

Also, it is a bad idea to direct bury any coax. See the Wireman's web site and his book for a fine discussion on the life of coax, and the abuses hams give it by burying. Condensation and corrosion are just two of the bad effects. Coax will give much longer life if in a PVC pipe sleeve if buried. Or in metal pipe.

Stuart K5KVH

L. B. Cebik was right, Counterpoise is a bad choice of words for antenna work, as some confuse it with a non radiating part called a radial. It is really the other 'radiating conductor' of the antenna!

Earlier this year, I took over the subject column from Ron, KU7Y and have already submitted two columns. I was inspired by my participation in the CQC and BUBBA sprints this past weekend to feature QRP sprints for my next column. My own operation was pretty mundane, so I'm looking for material from two or three participants in recent sprints who had an outrageously good time. BUBBA or CQC would be fine, although I don't mind going back a bit further. An outdoor adventure would be preferred, such as a backpacking-mountain-topping trip, boating trip, etc. If you had such an adventure and would like to tell about it in a nationally distributed magazine (National Contest Journal), e-mail me privately and tell me about it. Thanks!

Bob Patten, N4BP (0 0) Plantation, FL
o00o-()-o00

E-Mail: n4bp@bc.seflin.org
Web Page: <http://www.qsl.net/n4bp>

Brass Pounder BBS: (954) 472-7715
SOC #1Whiners #6

Date: Wed, 30 Aug 2000 07:07:12 -0400
From: "Pastor-KC1DI" <elbc@pivot.net>
To: <sjolin@swbell.net>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [78407] Re: 80m QRP DXing
Message-ID: <007001c01272\$74017c40\$e17961ce@elbc>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

----- Original Message -----
From: "Dave Sjolin" <sjolin@swbell.net>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Sent: Tuesday, August 29, 2000 11:51 PM
Subject: Re: 80m QRP DXing

> John AE5X wrote:
>
> > Anyone out there actively chasing DX on 80m while QRP? If so, I'm
> > interested in what type of antenna you use and whether you've had much
> > success with it as far as DXing. I'll be moving soon and have never (in
> > 22 years of being a ham!) been on 80m and would like to try it this
> > winter but need to decide on an antenna.
>
> John, you sure are looking for a challenge. DX comes much more slowly on
> 80 meters than on the higher bands, even 40 meters. If you are going to
> use qrp to work 80 meter dx, then you will need to erect a good antenna
> and learn all you can about gray line propagation.
>
> You will find that signals are dramatically stronger during the half
> hour to hour before sunset and after sunrise. At qrp levels you will
> need this boost to make it through the higher level of qrn found on this
> band. (hint it works at best ends of the path so as Europe approaches
> their sunrise, signals will grow in strength).
>
> As far as an antenna, I use a vertical with a good ground system and
> have worked DXCC on 80 meters. I will admit that most of this DX was
> worked at the 600 watt level. But much of the DX, itself, was using 100
> watts and their signals were easily Q5.
>

> You might also consider a loop or if you have a tower, slopers. The
> utility of dipoles and other horizontally polarized antennas will be
> dependent on how high you can get them. Unless you are in the NE USA, I
> think you need to get the antenna up 60 feet to have a shot at
> consistent dx on 80 meters at the qrp level.
>
> To rapidly increase your country count on 80 meters, be sure to operate
> in the the CQ World Wide DX contest and the ARRL DX contest. At these
> times you will find many stations active and many will be relatively
> easy to work because they are in the Caribbean. The CW portions of these
> contests will be particularly fruitful on 80. I would recommend going to
> 80 meters early in the evening to work the caribbean and South American
> stations. Later in the evening when the higher bands have closed you
> will find a lot more competition for these nearby countries. Assuming
> propagation is consistent, you will stand a better chance at working the
> Dx the second night after all the KW's have had their shot.
>
> Have fun
> 73 de Dave, N0IT
>

Dave makes many good comments I would add only one , get a copy of ON4UN'S
BOOK LOWBAND DXING and read the section on antennas, Slopers and verticals
have worked well for me I have about 25 countries so far qrp on 80m. But I
must admit that the temptation is great to increase the power when the qrn
is real bad.
73 Dave Kc1di

Date: Wed, 30 Aug 2000 11:42:51 +0100
From: "Walter D Amos" <waltk8cv@surfree.com>
To: "Posts Qrp-l" <qrp-l@lehigh.edu>
Subject: [78408] Fw: ANTS. Challenger 25 foot counterpoises
Message-ID: <000b01c0126f\$0d9aea20\$5d891b26@waltamos>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

<http://www.thewireman.com>

----- Original Message -----
From: "Stuart Rohre" <rohre@arlut.utexas.edu>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>

Sent: Wednesday, August 30, 2000 08:10
Subject: Re: ANTS. Challenger 25 foot counterpoises

> On the GAP Challenger, they are radiating parts of the antenna and that is
> what I call a counterpoise. There must be three of them. Each must be 25
> foot and not buried for efficiency of the antenna to. They can be
arranged
> in a "scrunched up" manner as long as you do not cross them over each
other,
> or short them out. The Counterpoise kit sold for this antenna is 3 each
25
> foot RG8x coaxes, with center and braid shorted. this is to give a wider
> bandwidth, as a large element.
>
> Also, it is a bad idea to direct bury any coax. See the Wireman's web
site
> and his book for a fine discussion on the life of coax, and the abuses
hams
> give it by burying. Condensation and corrosion are just two of the bad
> effects. Coax will give much longer life if in a PVC pipe sleeve if
buried.
> Or in metal pipe.
>
> 72
> Stuart K5KVH
> L. B. Cebik was right, Counterpoise is a bad choice of words for antenna
> work, as some confuse it with a non radiating part called a radial. It is
> really the other 'radiating conductor' of the antenna!
>
>

Date: Wed, 30 Aug 2000 07:56:14 -0400
From: David Hinerman <dlh1009@ritvax.isc.rit.edu>
To: qrp-l <qrp-l@Lehigh.EDU>
Subject: [78409] Re: Thermoelectric powered radio
Message-ID: <001201c01279\$52025040\$2d0a05cc@rochester.com>
MIME-version: 1.0
Content-type: text/plain; charset=iso-8859-1
Content-transfer-encoding: 7BIT

Dave,

Very good advice on the thermoelectric source!

> Thermionic and thermoelectric converters are rather old devices. They
> were studied extensively in the early 1960's but fell from fashion when
> fuel cells began to improve. About every 15 years the idea is
> resurrected and studied again using new materials or new geometries.
> The major attraction of these converters is silent and passive operation
> and the ability to utilize waste heat from combustion or other
> processes. Their efficiency is not very high but in some situations the
> advantages are too great to ignore. They have been used on some
> spacecraft to convert decay heat from bricks of radioisotopes to
> electricity. With no moving parts this power source is highly
> reliable.

I found a little information on the RTG (radioisotope thermoelectric generator) here:

<http://nova.nuc.umn.edu/Brochures/SpacePower.html>

I was especially impressed with this statement:

"In 1961, the first RTG used in a space mission was launched aboard a U.S. Navy transit navigation satellite. The electrical power output of this RTG, which was called Space Nuclear Auxiliary Power (SNAP-3), was a mere 2.7 watts. But the important story was that it continued to perform for 15 years after launch."

Batteries? We don't need no steenking batteries! (Grin) Just a wheelbarrow - the shielding on these things is heavy!

Dave

Date: Wed, 30 Aug 2000 06:12:39 -0600 (MDT)
From: "Karl F. Larsen" <k5di@zianet.com>
To: Pastor-KC1DI <elbc@pivot.net>
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [78410] Re: 80m QRP DXing
Message-ID: <Pine.LNX.4.10.10008300556030.774-100000@cannac.ampr.org>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Wed, 30 Aug 2000, Pastor-KC1DI wrote:

>
> ----- Original Message -----
> From: "Dave Sjolín" <sjolin@swbell.net>

> To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
> Sent: Tuesday, August 29, 2000 11:51 PM
> Subject: Re: 80m QRP DXing
>
>
> > John AE5X wrote:
> >
> > > Anyone out there actively chasing DX on 80m while QRP? If so, I'm
> > > interested in what type of antenna you use and whether you've had much
> > > success with it as far as DXing. I'll be moving soon and have never (in
> > > 22 years of being a ham!) been on 80m and would like to try it this
> > > winter but need to decide on an antenna.
> >

Big Snip

I just want to reinforce the fact that like 160 meters, don't even get on 80 meters in the summer! The reason? Noise. I am net control on a local 75 meter net called the New Mexico Breakfast Club. Been going for 40 years I know about. We get check-in's from AZ and TX and CO every day. The net covers about 500 miles in the summer. In the winter the noise goes down 30-40 db and we get check-in's from IL and CA and OR and WA. The same signals that are covered by noise in the summer are fine in the quiet winter.

For DX you can't beat a good 65 foot vertical with lots of long ground radials. The radials are 65 feet too. Find a source for old telephone line wire. You need a lot of wire.

If not possible look at slopers. Don't use a dipole unless you can get it 100 feet in the air. I use a dipole at 30 feet and it radiates straight up.

Yours Truly,

- Karl F. Larsen, k5di@arrl.net (505) 524-3303 -

Date: Wed, 30 Aug 2000 08:46:44 -0700
From: k8ff@juno.com
To: qrp-1@lehigh.edu
Subject: [78411] FS: K2
Message-ID: <20000830.084647.-991037.0.k8ff@juno.com>
MIME-Version: 1.0
Content-Type: text/plain
Content-Transfer-Encoding: 7bit

Due to lack of use, I am offering the following FOR SALE:

battery. I also have a Pelican	K2 sn 152 with SSB, NB and internal
supply with the 14.1 volt mod. All	1450 carry case and a RS switcher
aligned. \$900 plus shipping	in like new condition assembled and
Pelican case.	would also consider \$800 without

Please respond off the list or call me at 1(800)307-7297 days.

Regards, Wayne K8FF

YOU'RE PAYING TOO MUCH FOR THE INTERNET!
Juno now offers FREE Internet Access!
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<http://dl.www.juno.com/get/tagj>.

Date: Wed, 30 Aug 2000 07:50:32 -0500
From: "Ron White" <rwhite@netins.net>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [78412] Re: WTB: QRP Classics (Got one)
Message-ID: <002f01c01280\$e2e8df00\$420c8ea7@netins.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

To all,
Thanks for the responses on the QRP Classics book. I've been wanting one
for quite a while and now I have one.

Ron

Ron White
e-mail - rwhite@netins.net
Amateur radio WA0MWW

Date: Wed, 30 Aug 2000 09:07:19 -0400
From: "Lau, Zack, W1VT" <zlau@arrl.org>
To: "'qrp-1@Lehigh.EDU'" <qrp-1@Lehigh.EDU>
Subject: [78413] Re: System noise and very low noise receiver testing
Message-ID: <125490A005E3D3118C9C00805FC743CC8D9C0C@mail.arrl.org>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"

Hi Dan,

Receiver testing using signal generators is usually done with the equipment at room temperature, which is usually around 300 Kelvin. This is often indicative of receiver performance at 2 meters, where the background noise temperature of the sky is around 300 Kelvin. However, sky noise is much lower between 400 MHz and 10 GHz, so that a receiver might work against an ideal noise temperature of 30 Kelvin, 10 times less. However, at HF, the sky noise is much worse, due to contributions from galactic noise. Even worse than sky noise is man-made noise. I wouldn't be surprised to see a noise level of -110 dBm in a 500 Hz bandwidth at HF at a typical suburban location. Thus, the difference between a 10 and 20 dB NF at HF may be undetectable, while going from a 1 to 2 dB NF at UHF may mean the difference between perfect copy and just being able to hear someone (3 dB better SNR).

You don't have to do the testing at 300 Kelvin--it is possible to cool attenuators in liquid nitrogen to significantly lower the reference temperature. You can also buy dummy loads designed to be cooled in liquid nitrogen. Ideally, your sensitive receiver can easily detect the difference in thermal noise between a hot dummy load and a cold one.

Zack W1VT

Date: Wed, 30 Aug 2000 08:17:49 -0500
From: "Cla KA0GKC" <ka0gkc@arrl.net>
To: "QRP-1" <qrp-1@lehigh.edu>
Subject: [78414] Manhattan Construction
Message-ID: <050701c01284\$b4dc66a0\$0200000a@mcg.net>

Hi All,

I've found that I like Manhattan Construction, it took a little getting used

to and if you throw a little ugly construction technique in you can actually build things up pretty fast. The only thing I don't like about it is the glue. I probably should swing by the hobby store and get a bottle with a smaller opening than the one I have, or some of that small tubing they sell for the glue. But I'd like to get away from the glue altogether.

One idea that I had was to use double stick carpet tape. Laminate that to the back of the scrap circuit board you use to punch or nibble your pads from. Then you'd have little peel and stick pads. Has anybody done this and if so how did it work? Especially holding up to the heat? Don't happen to have the tape around so I haven't tried it yet. Next run to Home Depot I thought I'd get some. Any better suggestions for tape?

How about other ideas or techniques to eliminate the glue? Anybody?

73 de KA0GKC Claton Cadmus

ka0gkc@arrl.net

MNQRQ #1

Minnesota QRP'ers we're looking for you!

Email me or visit this page <http://www.qsl.net/mnqrp>

Date: Wed, 30 Aug 2000 09:11:03 -0400

From: "AI2Q Alex" <ai2q@ispchannel.com>

To: <thecabal@mindspring.com>

Cc: "QRP-L (E-mail)" <qrp-l@Lehigh.EDU>

Subject: [78415] RE: Thanks...and another question!

Message-ID: <000001c01283\$c12643a0\$5c32a7d0@ispchannel.com>

MIME-Version: 1.0

Content-Type: text/plain;

charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

Hi Jason, and congratulations to you.

In days past, folks such as yourself could get a job as a budding technician and thereby apply the theory on-the-job. You could rub shoulders with engineers, and learn more and more. Sadly, the days of discrete component engineering are fading, and technician jobs along with them. I used to see many classified ads in the newspaper for techs, but, alas, hardly any more.

In any case, there are some excellent books that are practice-oriented. Two that I like (but there are a number of other equally good ones) are

"Electronics, Principles and Applications," by Charles A. Schuler. It's published by McGraw-Hill Book, ISBN 0-07-055592-3. Another is "Electronic Circuits and Applications" by Bernard Grob. It's published by the Gregg Division of McGraw-Hill and used by Technical Career Institutes, Inc. Its ISBN is 0-07-024931-8.

What I like about these two texts is the fact that they're illustrated with actual real-world examples of components and systems, and that's supported by theory discussions.

GL in your quest, always use caution when working with live circuits, and have fun!

Vy 73, AI2Q, Alex in Kennebunk, Maine QRP-L 687 .-.-.

-----Original Message-----

From: owner-qrp-l@Lehigh.EDU [mailto:owner-qrp-l@Lehigh.EDU] On Behalf Of Jason Milldrum

Sent: Tuesday, August 29, 2000 2:36 AM

To: Low Power Amateur Radio Discussion

Subject: Thanks...and another question!

Thanks to those who took the time out to answer my air-variable capacitor question. I got 4 different useful ideas...it just goes to show the ingenuity of the QRP community.

Now to my next question. I'm learning radio and electronics all on my own, and sometimes it's hard to find out certain info. I really studied hard for my Extra test...read the ARRL book "Understanding Basic Electronics" and also looked up some of the relevant sections in the ARRL Handbook. I think that I've got a grasp of the basics, but I can't really find where to apply this info into practical examples. It's hard for me to just memorize equations and laws with no real framework to use it in. I, along with other people I'm sure, learn best when I can relate my theory with real-world examples. The question is, where can I find the information to help me bridge the gap between theory and practical application? Are there any good online courses or textbooks available? I know that the ARRL Handbook has some of that information, but I need it broken down into smaller chunks that are well-explained. Any help on this matter would be *greatly* appreciated.

Thanks and 72,
Jason

Jason Milldrum, KD7JKI
Salem, Oregon, USA
ARRL | QRP-L #2209 | FPQRP #118 | hamradiochat
Web: <http://thecabal.home.mindspring.com>

Join the hamradiochat discussion group:
<http://thecabal.home.mindspring.com/kd7jki/hamradiochat/>

Date: Wed, 30 Aug 2000 13:53:05 +0100
From: "Steve Sorrell" <ap036@detroit.freenet.org>
To: "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [78416] SMK1 Wowzers
Message-ID: <003901c01281\$4004a020\$89fa070a@default>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Wowzers guy's! Just finished putting the SMK1 in its NJ Club case yesterday and fired it up this am and worked Wayne NM3B/QRP in St. Marys, PA with a nice QS0. This little peanut whistle is amazing for what it is. Now off to try to work Glorioso Is. with it. Probably not, :-)
Steve Sorrell, W8SFF

Date: Wed, 30 Aug 2000 10:16:16 -0400
From: David Hinerman <dlh1009@ritvax.isc.rit.edu>
To: qrp-l <qrp-l@Lehigh.EDU>
Subject: [78417] Re: Manhattan Construction
Message-ID: <003501c0128c\$dceb1850\$2d0a05cc@rochester.com>
MIME-version: 1.0
Content-type: text/plain; charset=iso-8859-1
Content-transfer-encoding: 7BIT

> One idea that I had was to use double stick carpet tape. Laminate that to the
> back of the scrap circuit board you use to punch or nibble your pads from.
> Then you'd have little peel and stick pads. Has anybody done this and if so
> how did it work? Especially holding up to the heat? Don't happen to have the
> tape around so I haven't tried it yet. Next run to Home Depot I thought

I'd

> get some. Any better suggestions for tape?

>

> How about other ideas or techniques to eliminate the glue? Anybody?

Cla,

I use the cheap gel-style glue. Sometimes it's still wet when I go to solder the pad, so I have to be careful not to let the pad slide away, but a couple moments of heat from the soldering iron seems to cause the glue to set faster. (Although sometimes pads do break away afterwards - either the heat is breaking down the glue or the backplane board isn't clean enough. By that time, though, there are usually enough leads attached to hold the pad in place anyway.) It works in a pinch.

Somebody else on the list mentioned using small slivers of hot-melt glue. I've been meaning to try it (since my wife bought a pack of glue sticks that don't fit her glue gun) because you could re-position the pad by heating it. I never put anything in the right place the first time - I have a built-in excuse to modify it later.

I like the carpet tape idea, although I don't know how well it would work for me. I use an old Radio Shack nibbler to make the pads, and I'm not sure if the tool is sharp enough (i.e. tight enough tolerances on the "punch" and "die") to punch the tape cleanly. It's still worth trying, though.

Dave

Date: Wed, 30 Aug 2000 10:22:31 -0400

From: ekwik@rtimail.com

To: qrp-l@Lehigh.EDU

Subject: [78418] Michigan QRP Net

Message-ID: <OF11BC8A06.959887CF-0N8525694B.004AD708@rtimail.com>

MIME-Version: 1.0

Content-type: text/plain; charset=us-ascii

Boy last night the Net was great. Had lots of check ins.

K1QM Joel

N9SE Marty

N3AO Carter

NS80 Greg

NV4V Pete

W1NQ Jerry

WA8BXN Mike

Best showing yet with five states represented. Conditions were good. Heard a HK calling CQ after the net was over but no luck. Sounds like 80 meters is starting to come around. Thanks for the check ins. The MI QRP Net meets Tuesday nights at 9:00 PM Eastern time at 3.525 MHz.

AB8DF

Date: Tue, 29 Aug 2000 14:01:33 -0700
From: Brian Kassel <bkassel@dancris.com>
To: "Hendricks, Doug" <ki6ds@dpol.k12.ca.us>
Cc: qrp-l@lehigh.edu
Subject: [78419] Re: Contest: CQC QSO Party Results - K7RE
Message-ID: <39AC24AD.923F6BA2@dancris.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hendricks, Doug wrote:

>

> Brian, you had a great signal into central California.

Doug:

Thanks for the very kind words. I just knew that my signal had to be setting down somewhere ;)

>I ran over to see

> Dave Fifield Saturday, he is laying out the new NorCal Transceiver that Dan
> Tayloe had at Ft. Tuthill, and we were discussing some options.

I can hardly wait to see the kit in full production. After having briefly played with Dan's latest gem, it sure is a keeper, and unique to boot.

> Didn't have a key or paddle or I would have given you a call. I am sure
> that I could have worked you.

Sine conditions were lousy, your QSO would have ben especially welcomed. Hey, maybe conditions were nit that bad, could it be that folks just forgot their keys too?

> Anyway, great job. Wanted to let you know that you had a great signal into
> central California. 72, Doug

Thanks to you Doug, and to all the folks who participate in these events. They really know how to make a guy feel like a decent operator.

Brian K7RE

Date: Wed, 30 Aug 2000 10:37:42 -0400
From: "George Heron N2APB" <n2apb@erols.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [78420] Re: Manhattan Construction
Message-ID: <000601c0128f\$dc67fe40\$84ca9cce@gheron>
MIME-Version: 1.0
Content-Type: text/plain;
charset="Windows-1252"
Content-Transfer-Encoding: 7bit

Gluing the Manhattan pads is indeed sometimes tricky, especially if they are torqued by tugging/twisting components soldered to them, or by twisting/flexing of the board itself.

I've been successful for a number of projects now (and a couple of them big ones) by ensuring that the mating surfaces (pad bottom and top of main board) are clean and flat, applying just a small amount of glue, and having patience to hold it down tight for 5-10 seconds before stressing it when adding components to it.

But another trick I've been practicing is to use very thin copper board material. I picked up some super thin double-sided pcb material at Dayton this year -- seemingly about the thickness and flexibility of stiff paper like the kind used for the covers of QRPP or QHB. Must be about 1/64" or so? Can even cut it with scissors! I've found that as long as the resultant little punches I make with a standard paper punch are clean and flat, they tend to stick better than the thick ones.

Jim Kortge, K8IQY (father of 2N2/40 Manhattan Transceiver project) tells me that he's used these thin material pads before too and found the capacitive/dielectric factor to be even better than achieved with the thicker pads. Might also be good with the double-sticky rug tape mentioned here, but I haven't tried that at all yet.

73, George N2APB
n2apb@amsat.org

=====
I've found that I like Manhattan Construction, it took a little getting used to and if you throw a little ugly construction technique in you can actually

build things up pretty fast. The only thing I don't like about it is the glue ...

Date: Wed, 30 Aug 2000 08:43:49 -0600 (MDT)
From: "Karl F. Larsen" <k5di@zianet.com>
To: QRP-L List <qrp-l@lehigh.edu>
Subject: [78421] Selling QRP
Message-ID: <Pine.LNX.4.10.10008300832590.1031-100000@cannac.ampr.org>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Yesterday 40 was rather quiet and I was talking to 2 hams about 200 miles away on 7273 KHz. I had just worked ok2ffk on 15 meters running 5 watts and told them how well it works on cw. KD5IJT and KD5DXV were both interested. So the discussion got onto QRP. We were all running 50-100 watts ssb then and I adjusted my TS-140 to 5 watts and saying nothing for awhile continued in the discussion. After a couple of rounds I told them I was now running QRP power. They were amazed.

Both talked about building a QRP radio and I pushed the nc20 as a good rig if you get a 10 turn tuning pot and the nice case. They are both interested.

Today if it looks good I'm going to ask them to turn down their power on the rig they now have. Should be a lot more fun than talking the weather and politics.

Yours Truly,

- Karl F. Larsen, k5di@arrl.net (505) 524-3303 -

Date: 30 Aug 00 09:51:52 EST
From: M Goins <mgoins@usa.net>
To: qrp-l@LeHigh.EDU
Subject: [78422] OT PROBLEM -THANKS
Message-ID: <20000830145152.12102.qmail@awcst094.netaddress.usa.net>
Mime-Version: 1.0
Content-Type: text/plain; charset=US-ASCII
Content-Transfer-Encoding: quoted-printable

The number of people who took the time to respond to my monitor problem. =

was
outstanding. Thanks again to a truly great group of people. =

mike
wb5yjx

Get free email and a permanent address at <http://www.amexmail.com/?A=3D1>

Date: Wed, 30 Aug 2000 10:53:10 -0400
From: Bruce Muscolino <w6toy@erols.com>
To: ka0gkc@arrl.net
Cc: QRP-L@lehigh.edu
Subject: [78423] Re: Manhattan Construction
Message-ID: <39AD1FD6.296C@erols.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Cla,

If you are using CA type glue to stick your pads down I would suggest a fine applicator and using the thick type and maybe the slow setting kind. Both are available from your local hobby dealer.

You don't need a glue that sets up faster than you can think. The thick CA will permit a more even application and if you buy the slow setting kind it will allow some time for adjustment.

I wouldn't use carpet tape, the heat of soldering and desoldering will delaminate it!

You could use double sided board for your pads and solder them to the backplane.

73

Date: 30 Aug 00 10:39:27 EST
From: M Goins <mgoins@usa.net>
To: qrp-l@LeHigh.EDU
Subject: [78424] psk question
Message-ID: <20000830153927.16701.qmail@awcst094.netaddress.usa.net>
Mime-Version: 1.0

Content-Type: text/plain; charset=US-ASCII
Content-Transfer-Encoding: quoted-printable

Does anyone know where I can get find the PSK software Zakanaka? I'm tryi=
ng to
get setup for qrp PSK-31 and want to try several of the software packages=
=2E The
URL <http://www.chroniclenetworks.com/~dwm/Zakanaka.htm>
is (404)dead. Thanks.

mike
wb5yjx

Get free email and a permanent address at <http://www.amexmail.com/?A=3D1>

Date: Wed, 30 Aug 2000 11:53:16 -0400
From: ekwik@rtimail.com
To: qrp-1@Lehigh.EDU
Subject: [78425] Michigan QRP Net correction
Message-ID: <0F3268E08C.DFA3770A-0N8525694B.00572E99@rtimail.com>
MIME-Version: 1.0
Content-type: text/plain; charset=us-ascii

Oooops

Make that 3.535 Mhz

----- Forwarded by Edward A Kwik Jr/TR0/RTI on 08/30/00 11:52 AM -----

Edward A Kwik Jr	To: qrp-1@Lehigh.EDU cc:
08/30/00 10:22 AM	Subject: Michigan QRP Net

Boy last night the Net was great. Had lots of check ins.
K1QM Joel
N9SE Marty
N3AO Carter
NS80 Greg

NV4V Pete
W1NQ Jerry
WA8BXN Mike

Best showing yet with five states represented. Conditions were good.
Heard a HK calling CQ after the net was over but no luck. Sounds like 80
meters is starting to come around. Thanks for the check ins. The MI QRP
Net meets Tuesday nights at 9:00 PM Eastern time at 3.525 MHz.

AB8DF

Date: Wed, 30 Aug 2000 10:52:04 -0500
From: "Cla KA0GKC" <ka0gkc@arrl.net>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [78426] Re: Manhattan Construction
Message-ID: <05a501c0129b\$1c6cd820\$0200000a@mcg.net>

Hi All,

I've had several replies about CA glue. I should have mentioned that this was
the glue I was using and have several varieties here. I'd like to get away
from using any glue at all. Bruce mentioned soldering double sided pieces to
the ground plain. I'll have to try that, but I think it might have a couple
problems. Getting it soldered from the side and possible solder shorts to the
top, especially with thin PCB pads.

Having been in the label printing business for many years I'm sure there is an
adhesive out there that would work. Years ago we produced printed aluminum
labels that were applied to motorcycle mufflers. It wasn't an intended
outcome, but the customer told us the labels never came loose or even
discolored after the muffler was installed and hot. I was just hoping someone
had already found double stick tape that worked. If not, I'll give it a try
and let the list know.

I also use a thin single side board for my pads. It's thin enough that it can
be punched with a single hole paper punch. Nice for a little larger pad. I
have a Radio Shack nibbler for the small ones. It originally cut then two
small so I took it apart and ground the notch in the punch deeper so it makes
a bigger pad. Works OK.

73 de Cla KA0GKC

Date: 30 Aug 00 11:18:51 EST
From: M Goins <mgoins@usa.net>
To: qrp-l@LeHigh.EDU
Subject: [78427] ZAKANAKA help
Message-ID: <20000830161851.5486.qmail@aw161.netaddress.usa.net>
Mime-Version: 1.0
Content-Type: text/plain; charset=US-ASCII
Content-Transfer-Encoding: quoted-printable

Thanks to all who replied so quickly. It does appear to be available in B=eta versions for 24 hours at a time and then it disappears. Stil under development, but looks promising. Digipan wins for now.

mike =

Get free email and a permanent address at <http://www.amexmail.com/?A=3D1>

Date: Wed, 30 Aug 2000 16:40:01 GMT
From: "laura halliday" <marsgal42@hotmail.com>
To: qrp-l@lehigh.edu
Subject: [78428] Re: psk question
Message-ID: <F292JeZLLkZXgrrMslX00003448@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

Subject: psk question
From: M Goins (mgoins@usa.net)
Date: Wed Aug 30 2000 - 11:39:27 EDT
Mike WB5YJX wrote:

>Does anyone know where I can get find the PSK software
>Zakanaka? I'm trying to get setup for qrp PSK-31 and want
>to try several of the software packages. The URL
><http://www.chroniclenetworks.com/~dwm/Zakanaka.htm>
>is (404)dead. Thanks.

A quick search in Hotbot produced 17 hits, most of which were links to the URL you quoted. Which means you're probably SOL.

I've been playing with twpsk. It works fine. There are others floating around based on the same PSK31 classes,

but with different UIs (text, Qt, LessTIF, etc.)

Laura Halliday VE7LDH "Que les nuages soient notre
Grid: CN89mg pied a terre..."
 - Hospital/Shafte

Get Your Private, Free E-mail from MSN Hotmail at <http://www.hotmail.com>.

Share information about yourself, create your own public profile at
<http://profiles.msn.com>.

Date: Wed, 30 Aug 2000 11:55:40 -0500
From: "Stuart Rohre" <rohre@arlut.utexas.edu>
To: <qrp-1@Lehigh.EDU>, "Steve McDonald" <jsm@gulfislands.com>
Subject: [78429] Re: ANTS. buried coax, even direct burial type will not last as
long as you might want
Message-ID: <000901c012a3\$21213ed0\$5ac07481@rohredt2000>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

utility of "direct burial" cable? A marketing term!
Only if you can guarantee that no moisture will collect in a pool around it,
and we know there are no guarantees in life. Yes, you can bury some wire
for a period of time. Bell Telephone did that in my back yard for 15 years,
but it did not have the silicon grease to exclude moisture, and it
ultimately shorted out, and they had to hand dig a new 100 pair cable thru 3
blocks of developed back yards with fences. The new stuff has a protective
outer sleeve.

What I am saying, is there is no free lunch with coax, and if you want to
protect your investment for as long as you can, pvc conduit is cheap
insurance, but not fool proof, as condensation is still the big enemy as the
humidity changes, especially here in the South and Southwest.

72, Stuart K5KVH

Date: Wed, 30 Aug 2000 10:35:42 -0700
From: "Steve McDonald" <jsm@gulfislands.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [78430] Crystals from MH Electronics

Message-ID: <000701c012a8\$bb62e480\$6d11f4cc@jsm>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I have been in touch with MH Electronics (in California) re purchasing xtals
for the QRP freqs...their HC49 style runs at \$9.60

Has anyone had dealings with MH and if so how did you find their
product/service?
Thanks,

Steve / VE7SL

Date: Wed, 30 Aug 2000 10:48:10 -0700
From: "Bob Tellefsen" <n6wg@earthlink.net>
To: <qrp-l@Lehigh.EDU>
Subject: [78431] Re: TT II Skeds Tonight?
Message-ID: <003a01c012aa\$77155180\$7cf0fc9e@oemcomputer>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Steve
I'm having fun playing with my new SMK-1. I'll be around 7039 this evening.
I worked two stations in the Seattle area last night, so hopefully BC isn't
that much farther away. That would be a fun QSO.
73, Bob N6WG

Date: Wed, 30 Aug 2000 10:57:57 -0700 (PDT)
From: Doug Bankston <dougbankston1@yahoo.com>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [78432] On-Line QRP Publication (September)
Message-ID: <20000830175757.5047.qmail@web4302.mail.yahoo.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

Hello everyone,

Just wanted to let you know that the September issue of "BAREFOOT RADIO" the official on-line publication of the Virginia QRP Society is hot off the presses and can be viewed at www.qsl.net/vqs (Click on Barefoot Radio)

This month's features include:
Articles by KA0TPZ, W4IM, AE4CU, W3HSW, KC0GXX and a ever so candid QRP internet web report from the controversial W4IDW (Doug "Drudge" Report).

Enjoy the reading gentlemen, this effort is being done for our fellow QRP'ers. A big thanks to this months contributors....
72/73 from the Virginia QRP Society/W4VQS

Do You Yahoo!?
Yahoo! Mail - Free email you can access from anywhere!
<http://mail.yahoo.com/>

Date: Wed, 30 Aug 2000 20:04:32 +0200
From: mike.mhe@t-online.de (Michael Haugrund)
To: hq@arrl.org, peter@barville.freeseve.co.uk, lz1fw@nettaxi.com, k1ar@cq-amateur-radio.com, crklub@mbox.vol.cz, g3rjv@gqrp.com, GQRP@onelist.com,
hrr@hztk.tel.hr, qrp-1@lehigh.edu, zyg@morsum.demon.co.uk, hqpzk@pzk.org.pl,
ve2zp@lynx.ve3jf.ampr.org
Subject: [78433] 8.0QRPC: comments
Message-ID: <13UCDw-0cwcSIC@fwd06.sul.t-online.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 8BIT

DJ7ST

8.0QRPC: comments
=====

Only one for sure O-QRP-stn worked. Canadian contest much busier (K5DI)

Fantastic wx (like every year!) Condx: heavy QRN on 80&40m (ON6WJ/p)

Tks fer possibility! (HA8LNT)

As a boy of ten we played in the neighbourhood...Just 150m from my home was a

piece of wire strung between two blocks of houses. On rare occasions we heard some strange noises when an upstairs window was open.... that wire was the antenna of PA0TA....(PA0RDT)

Lousy condx, would appreciate higher bands...quite sure we would have DX participation if 21/28 were included (OH9VL)

Not possible to work on 80m, very noisy! (PA3ALM)

80m was horrible, but 40m was fine and lots of stns to work (PA0RDT)

...here on west coast wx was very thundery and it was very hard to get QRP signals out of bad QRN. Still a great QRP Contest. Always happy to meet again many good friends (F6ACD)

Managed to squeeze in 5 hours contest operation during family rally - enjoyed both.. (LA3BX)

Sorry I was not able to participate for long (GW0VSW)

Sorry, due to family obligations just a few hours on the bands. Conditions poor, esecially for VLP (S53BH)

The OQRP-Contest is the great European CW-contest... (OK1FVD)

Tnx letters. Vy QRN local but worked more VLP stns then in 7th OQRPC (LZ1IQ)

Very beautiful contest for QRP... (OK1AIJ)

A 10kV/380V power transformer just 100m from my antenna caused a noise level over S9 almost all the time. Many thanks to all QSO partners for their patience (SV8/OH2JXA)

Sorry again for my poor participation. My QTH is invaded by QRN almost all the time. I hope in future the problem will be fixed (EA5ADE)

All QSO made from parked car...had a lot of fun by driving 'pile up' with 1W. Great contest (S53MA)

CW is true hobby-but QRP is TOP! (SP3BOL)

Vielen Dank f r die Organisation des Kontests (DL90CI)

...I propose a power identification for less than 50mW output (100mW input): ULP (F5ZV)

Short skip condx on 20m, could hear a faint signal from I1BAY...nice idea on QRP Minimal Art Session. But beware "Entia non sunt multiplicanda" Occam says

(I1EFC)

Vy QRN, trotzdem a fine contest with a lot of VLP stations (PA0YF)

I had a lot of FUN with my VLP! (PA3FSC)

After 80 hours of work for me a new era in QRP began with the K2 (I1BAY)

Remarks: This was my 8th OQRP Contest.....(YU7SF)

Bad condx or bad antenna? Thanks for the test (EA5CEC)

Prima Contest, but my rig at 19:55 TOTAL EXITUS, sri (OK1DLY)

New location...No antennas ...early in the morning put up my camping inv Vee on "Angelrute" (PA3FGI)

At least it will not be hard to have a better score next time--- (F/ON4KAR)

I did have an enjoyable contest time in spite of the magnetic loop hanging on the ceiling of the shack and a GPA3 with one radial missing due to heavy wind (PA0ANK)

Many DL-stns and less EU on 20, so no extra multipliers...met many participants of last years, so still nice... (PA0ATG)

...enjoyed the short time I could participate. Keep it going, please (PA0RBO)

Conditions were difficult at times with low QRK. But even on 14 MHz with 3 xtals I could find DX - amazing! Again the VLP operators produced some impressive results (G3DNF)

Due to VLP had to be very PATIENT! Lots of my transmissions not heard!(M0AEK)

Not many QSO on 80m; heavy QRN at start and end...worked my multipliers on 20m, pleased to work K9GA (G0KRT)

Conds not so good - QRN from thunderstorms (SM5DQ)

Lots of activity on 7 MHz. Great opportunity to meet old - and new QRP enthusiasts! (OZ3AAA)

Tested my new rig MALTA, fb on 7 MHz. Tnx fer nice contest (OK1DZD)

Mais suis toujours heureux de participer a votre contest. Tacherai de mieux faire l annee prochaine (FM5CW)

Found hardly any stns using the WHOLE CW portion, so too many crowded about

3.56 (GM4BKV)

Had some trouble with my QRP rig, but got it working a good few hours before the end of contest (OH2YL)

There were a lot of QRP stns to copy (ON5AG)

Enjoyable - but a little hard going! (G8IB)

Probably no one I worked was in the Original-QRP-Contest (N4BP)

Three hours 20 minutes of operation time and 20 countries worked including FM and RA9 - it has to be a successful event! But it would be even nicer if we could get just half of these QRP stations on every weekend...without regular activity we may lose these frequencies...(G8PG)

73/2 "Hal", DJ7ST

(mailing done by df2ok)

Date: Wed, 30 Aug 2000 11:21:47 -0700 (PDT)
From: Steve Yates <aa5tb@yahoo.com>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [78434] Re: ANTS. buried coax, even direct burial type will not last as long as you might want
Message-ID: <20000830182147.13266.qmail@web3005.mail.yahoo.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

If you live in North Texas you don't to worry about it since it NEVER rains here anymore! Just run the coax through an existing crack in the ground. Be sure to hold one end of the coax because if you don't you may lose the coax in the bottomless crack. As a plus the ground can help prevent your coax from melting in the summer heat. The only drawback may be that if your house falls in a crack the coax may snap. ;-)

=====

73,

Steve Yates - AA5TB

Fort Worth, TX - EM12gs

<http://www.geocities.com/aa5tb>
aa5tb@arrl.net

Do You Yahoo!?
Yahoo! Mail - Free email you can access from anywhere!
<http://mail.yahoo.com/>

Date: Wed, 30 Aug 2000 13:00:47 -0600
From: "Marshall Emm" <mgemm@mtechnologies.com>
To: qrp-1@lehigh.edu
Subject: [78435] Fox: Results after Hunt 16, and commentary
Message-ID: <39AD057F.13703.8E0D5B@localhost>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT

The Summer Fox Hunt results have been posted on the web site at
<http://www.cqc.org/sfox> . I'll post them here separately for those of you who
can't get to the web site.

The number of hounds with perfect scores has been reduced by one. And every
hunt we seem to add several new callsigns to the hound list.

Right now there is a 3 way tie for first place among the hounds, and the foxes
are anybody's guess, with at least two of the remaining 4 having a good shot at
coming out on top. And the teams... can the Big Dawgs hang onto their 2 point
lead over the Swam Rats?

The two double hunts will be very interesting-- both because of the fact that
we've never done this before and hounds will have a new challenge in trying to
work out which fox to work when, and because of the pairings. But more about
that later.

Looks like we're winding up to a big, exciting finish, and I wish you all
(foxes, hounds, and teams) every success in the Final Four.

Marshall Emm, N1FN
Milestone Technologies, Inc.
(303) 752-3382
<http://www.mtechnologies.com>

Date: Wed, 30 Aug 2000 13:04:14 -0600
From: "Marshall Emm" <mgemm@mtechnologies.com>
To: qrp-1@lehigh.edu, cqclist@cqc.org
Subject: [78436] FOX: Results after Hunt 16 (data)
Message-ID: <39AD064E.29084.913659@localhost>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT

Foxes:

Call	1st	2nd	Total
------	-----	-----	-------

K0EVZ	69	42	111
-------	----	----	-----

AE2T	63	76	139
------	----	----	-----

N5TW	68	75	143
------	----	----	-----

WJ1R	53	0	53
------	----	---	----

W8RU	56	77	133
------	----	----	-----

N4ROA	63	60	123
-------	----	----	-----

N0UR	73	75	148
------	----	----	-----

K7Q0	30	0	30
------	----	---	----

N1FN	92	0	92
------	----	---	----

NW7DX	72	0	72
-------	----	---	----

Total QSOs: 1044

Hounds-----

16 out of 16 ...PERFECT SCORE

AE9F

AJ4Y

K0EVZ

15 out of 16

K5DI

K6VNX

N1FN

NK7M
VA6RF
W7ILW
WJ1R

14 out of 16

K5AAR
N4ROA
N5TW
NQ7X
NW7DX
W0CH
WA7SPY

13 out of 16

AF4PS
AJ4AY
K5OI
N1TP
N5IB
N6WG
W5YR

12 out of 16

K7TQ
KA1DDB
N5ZE

11 out of 16

N0UR
N6MM
NV4V
W5YW
W7QQQ

10 out of 16

AA7EQ
AF5Z
K1QM
K7QO
KC1FB
VE5RC
VE5VA
VE7SL
WD5CMA

9 out of 16

AF4LQ

K9IUA
NK6A
W7MD
W8DIZ
WS4S

8 out of 16

AA5UN
K5LN
KG4BIG
N5IW
NM5M
W2XN

7 out of 16

AG0T
KM5VY
N0RC
WB8RCR

6 out of 16

AF4PP
K5DW
K8CV
KA5T
KA9TXE
KB7WW
KF2P
KI0II
N9AW
W4EN

5 out of 16

K5JHP
KB1ENS
KK5LD
N4SO
N5GJQ
N8IE
NK9G
W0AV
W4NJK

4 out of 16

AB8DF
K0CO
K2ZN
K3NY

K5EOA
K5TR
K5UP
K5ZTY
KB9BVN
KK6MC
N5FC
N5GLQ
N7CQR
W3CD
W6ABC
W6BAB
W9UQB
WB0HQP
WB6JBM

3 out of 16

K0FRP
K0PC
K1CL
K8ZT
KE1LA
KU7Y
N4HAY
NN5B
VA7NT
VE5QRP
VE9GM
W0RW
WZ2T

2 out of 16

AA0B
AA0ZZ
AB0CD
AC7AC
AC7CF
AD6JY
AE2T
AK1P
K0SQ
K0Y0
K1JD
K1MG
K4AVX
K4LKL
K4LL
K5BGB

KB7MBI
KD6VIO
KI0RB
KQ5U
KU4AF
N10DL
N6NU
N9SE
NA6E
VE3ZBU
VE6JAZ
W0HEP
W0UFO
W1II
W1RO
W1XT
W5JAY
W6ZH
W8RU
WA0SXV
WB5QYT
WD9IFF
WE7G

1 out of 16

AA6AV
AA8IV
AB0GO
AC4HF
AC7AX
AE4MU
AE9K
F5JD
HP1AC
K0EPK
k0QD
K0ZK
K1LOG
K4AO
K4GZZ
K5AX
K5KW
K5PSH
K7FD
K7UD
KA0ERU
KB2SWY
KB6FPW

KB7N
KC5MC
KC5NT
KD7AEE
KD7CTF
KD7KTF
KF2DA
KF6RMK
KG4IKQ
KG7PV
KI0MZ
KK7GG
KM4LS
KN6YD
KQ0I
KR5C
KT3A
KW7D
KX3X
N0AR
N0MF
N0RZ
N1YJ
N2CQ
N3LAZ
N5JI
N5MX
N5NF
N5UW
N6GA
N6TUU
N6XU
N7XY
N8ME
N9BOR
N9QIL
NC90
NF0R
NI0A
PY2CWS
SM4BNK
SM4MWJ
VE3JC
VE3VRA
VE3VX0
VE7BGP
W1CFI
W2APF

W2KJ
W3ERU
W4EEX
W4SI
W4WLG
W6ASH
W6CJ
W7
W7AQK
W7HR
W7VP
W8HRQ
WA4GIJ
WA6HZY
WA8BXN
WA8KOQ
WA9PWP
WB5CMA
WB5GWB
WB8YYY
WD4OJY
WQORP

Hounds allocated: 240
QSOs allocated: 1044

Date: Wed, 30 Aug 2000 13:34:13 -0600
From: "Rod, N0RC" <n0rc@qsl.net>
To: "qrp-1" <qrp-1@Lehigh.EDU>
Cc: "Jim Larsen" <a17fs@hotmail.com>
Subject: [78437] wow! nc20 mojo
Message-ID: <023401c012b9\$992d33a0\$3e8511d8@zephyr>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

This is just to weird.

I just finished assembly & tuning of an NC20 for our friend up in Anchorage, AK, Jim, AL7FS. As a "Final Test" I put it on the air today at ~1920z, 4-5W into my attic dipole.

I called CQ once, got an answer, WL7CDC, Doug, in __ANCHORAGE, AK__!!!
569 both ways.

Jim, you rig passed final test! It will ship tomorrow.

72/3 Rod, NØRC -- Fort Collins, CO

HOME OF BIG HOOTIE MONOBANDER MOJO!!!!

Date: Wed, 30 Aug 2000 15:37:11 EDT
From: GUARDM@aol.com
To: qrp-l@lehigh.edu
Subject: [78438] OT TCP/IP and Windows HyperTerminal
Message-ID: <c3.8b69638.26debc67@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

Hello,

I've been playing around with TCP/IP connections and was wondering if anyone knows how to set up Hyperterminal so you can see what you are typing. The best I could find is under the properties box an area to "Echo typed characters locally"

So I did that but it didn't work. Also if you know of a better terminal program that supports TCP/IP Please let me know.

72/73,

Mev KG9NF

Madison Wisconsin

QRP-L #2066 10X #7014 ARS #641 SOC#127

<http://www.qsl.net/kg9nf> ICQ# 49602335

Packet kg9nf@wd9esu.#scwi.wi.usa.noam

"Remember, amateurs built the ark, Professionals built the Titanic!"

Date: Wed, 30 Aug 2000 15:00:26 -0500
From: "Chuck Carpenter" <w5usj@globeco.net>
To: aa5tb@yahoo.com, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [78439] Re: ANTS. buried coax, even direct burial type will not last as long as you might want
Message-ID: <3.0.2.32.20000830150026.007c0e70@mail.globeco.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

But...

When it does rain, that black land clay will expand and squeeze the RF right out of your coax.

No problem with cracks out here in East TX. The grounds so hard it can't crack

No rain 60 days and counting but it's cooler over here than at EM12gs

Average afternoon high temps only 98 8^)...

Chuck Carpenter, Point, Rains County, Texas -- EM22cv, RARA #003
ARCI #5422, QRP-L #1306, SOC #57, Six Club #201, SMIRK #6275

Date: Wed, 30 Aug 2000 15:04:34 -0500
From: "Manager QRP-L" <manager@astro.cc.lehigh.edu>
To: <GUARDM@aol.com>, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [78440] Re: OT TCP/IP and Windows HyperTerminal
Message-ID: <062301c012bd\$95d72e00\$0200000a@mcg.net>

Hi All,

I just want to remind people to send replies to Mev in private and not to the list. This is just the kind of inquiry where I'm sure Mev will get a lot of help from here and just what OT is for, but the appeal of the answers is probably pretty narrow. If you're curious what results Mev gets, drop him an email and ask. If he gets a lot of inquiries then Mev can post a synopsis to the list. This limits the OT to just two posts and still gets the job done.

To answer your question Mev. I don't think HyperTerminal will work for TCP/IP, I think it's just a dialup BBS program. Most TTY connections on the Internet are via Telnet. If you click "Start" and then "Run" and type "Telnet" in the window, a Telnet client will pop up. It's not the best, but it does work.

Hope this helps,
GL and 73 de Cla KA0GKC Manager QRP-L

From: <GUARDM@aol.com>
| I've been playing around with TCP/IP connections and was wondering if anyone
| knows how to set up Hyperterminal so you can see what you are typing. The
| best I could find is under the properties box an area to "Echo typed

| characters locally"
| So I did that but it didn't work. Also if you know of a better terminal
| program that supports TCP/IP Please let me know.
|
| 72/73,
| Mev KG9NF
| Madison Wisconsin
| QRP-L #2066 10X #7014 ARS #641 SOC#127
| <http://www.qsl.net/kg9nf> ICQ# 49602335
| Packet kg9nf@wd9esu.#scwi.wi.usa.noam
| "Remember, amateurs built the ark, Professionals built the Titanic!"
|

Date: Wed, 30 Aug 2000 16:10:27 -0400
From: Bill Coleman AA4LR <aa4lr@radio.org>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [78441] Re: Thermoelectric powered radio
Message-ID: <1000730161026.QAA21280@gate.iterated.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"

On 8/29/00 11:41 PM, David Sarraf at david.sarraf@paonline.com wrote:

>Several organizations have used them to make electricity in
>the field using either waste heat recovered from turbines or directly
>heated by some source of external combustion. Such generators are
>versatile, reliable, and nearly silent.

What ever happened to Magnetohydrodynamics (MHD)? I remember reading about MHD as a kid in the 70's. MHD involves taking a hot gas (such as that in a smokestack or other exhaust), passing it through a magnetic field between two electrodes. The resulting process only uses one moving part (the hot gas) and generates a sizable amount of electricity.

The only tricky part is keeping the electrodes intact in the corrosive environment of the exhaust gas. You'd think materials science might have solved this problem in 30 something years. It certainly did with the magnets, as very powerful magnets can be made today.

Bill Coleman, AA4LR, PP-ASEL Mail: aa4lr@radio.org
Quote: "Boot, you transistorized tormentor! Boot!"
-- Archibald Asparagus, VeggieTales

Date: Wed, 30 Aug 2000 16:10:20 -0400
From: Bill Coleman AA4LR <aa4lr@radio.org>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [78442] Re: Thermoelectric powered radio
Message-ID: <1000730161020.QAA21246@gate.iterated.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"

On 8/30/00 7:56 AM, David Hinerman at dlh1009@ritvax.isc.rit.edu wrote:

>I was especially impressed with this statement:
>
>"In 1961, the first RTG used in a space mission was launched aboard a U.S.
>Navy transit navigation satellite. The electrical power output of this RTG,
>which was
>called Space Nuclear Auxiliary Power (SNAP-3), was a mere 2.7 watts. But the
>important story was that it continued to perform for 15 years after launch."
>
>Batttries? We don't need no steenking batttries! (Grin) Just a wheelbarrow -
>the shielding on these things is heavy!

I remember visiting Oak Ridge, Tennessee a number of years ago. They had a radioisotope driven thermocouple battery on display. It had been generating power continuously since 1947. Of course, it was only a few watts, and the whole assembly weighed about 400 lbs, including the metal sheilding.

Most interesting, though, was you could get within a couple of feet of this device, and just FEEL the heat rolling off of it. All after decades of operation.

I read an article that discussed there's a 10,000,000-fold increase in energy density when going from chemical to nuclear sources of energy. The best example of this can be demonstrated with a question:

How do you refuel a nuclear submarine?

(Answer in a moment)

If you think about it, though, even a 1,000-fold increase in energy density would make a big difference. Imagine only filling up your car every 300,000 miles instead of every 300. Portable computers would run for 5,000 hours instead of 5. Military jets that can fly for weeks at a time, instead of just a few minutes at supersonic speeds. Airlines that

can stay aloft for years before refueling.

I personally believe that these types of nuclear sources will be tapped within my lifetime. What form they will take - I don't know. Might be Fission, Fusion, Cold Fusion (whatever that may be), or something like superconducting batteries (which is my favorite -- safe, clean and really dense).

Ok, the answer to refueling a nuclear submarine:

They take cutting torches and cut the reactor OFF. Then they weld a new reactor on. Note that this essentially replaces about 1/3 to 1/4 of the submarine. Sounds like a lot of trouble, eh?

Well, they only have to do it once every 12-18 YEARS.

Bill Coleman, AA4LR, PP-ASEL Mail: aa4lr@radio.org
Quote: "Boot, you transistorized tormentor! Boot!"
 -- Archibald Asparagus, VeggieTales

Date: Wed, 30 Aug 2000 13:46:42 -0700
From: Jerry Parker <jparker@fix.net>
To: qrp-1@LeHigh.edu
Subject: [78443] NorCal's September Meeting this Sunday
Message-ID: <2.2.32.20000830204642.006cb9e4@fix.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

The Upcoming September Meeting

QRPers, the September meeting of the NorCal QRP Club will be held as usual Sunday September 3rd at the California Burger Restaurant, located off the Santa Rita Exit of I580 West of Livermore and East of Pleasanton. The California Burger is located in the small shopping center behind the Shell Station across the street from McDonald's Restaurant. If you are coming from Livermore, take the Santa Rita exit, and you will come to a stop light. Turn left and go over the freeway. You will come to a traffic signal. Turn left, and you will notice a McDonald's on your left, and a Shell station on your right. Take the first right turn, (about 107 yards, 2 feet and 7 1/4 inches from the intersection) and you will be in a small shopping center. The

California Burger is in the SouthWest corner of the shopping center. Look for all of the cars, you can't miss it.

If you are coming from Pleasanton, take the Santa Rita exit to your right. You will come to a traffic light. Go straight across the street, and you will see the McDonald's and Shell Station. Same directions as above.

Remember, if you have never been to a QRP meeting, this is not like all of the other meetings you go to. It starts about 10:30 and ends about 1:30 or so. No rules, no minutes, no new business, no old business, just a get together of QRPers who want to meet and share QRP information with others of like interests. Our meeting is entirelyly social, and those who attend always seem to enjoy themselves. If you come, bring along your latest project to share with the rest of us, we want to see and admire it, probably steal a couple of your ideas in our next project, but we will have fun!

72,
Doug, KI6DS

Date: Wed, 30 Aug 2000 15:31:23 -0600
From: Valeriy Agabekov <wj1r@chisp.net>
To: qrp-l@Lehigh.EDU
Subject: [78444] sfox thursday
Message-ID: <39AD7D29.D6A080C2@chisp.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=x-user-defined
Content-Transfer-Encoding: 8bit

Hello, I'm WJ1R. I will be on 14061 +/- 1 khz. My exchange for the fox 559-CO-LARRY-2137 Welcome everybody, I like pileup's. Hope to work you all. 73/72
Larry WJ1R / UA6HZ ex: 4J1FS, 4J6A, U3MIR/7, EX0CL, UA6HZ/JW, UA6HZ/UG, UG6GZ, W3A, R6ER, R50A, R3SRR, UA6HZ/DL, /F, /EA7, /EA8, UL7, /UA0, /UA9, /UB5, e.t.c.
Thanks, and see you on 14061/62 this thursday from 0100z to 0300z

Date: Wed, 30 Aug 2000 17:45:24 EDT
From: n5ib@juno.com
To: qrp-l@Lehigh.edu
Subject: [78445] Re: Manhattan Construction
Message-ID: <20000830.164130.4671.1.N5IB@juno.com>

I've not very much insight to add to the glue question. I use whatever CA glue is at hand. But though I might pass along one tip.

I make my pads from the thinner (~ 1/32 ") PC stock, punching it with either an old Adel nibbler or a Harbor Freight punch (they just opened a store in Baton Rouge!!! - guess who was standing in line at the door for the grand opening!??) I take out the 150 watt Weller gun and tin several square inches of board BEFORE punching out a few dozen pads at a sitting - storing them in a pill bottle. Now all I have to do is glue 'em down and they're pre-tinned and ready to go.

72

Jim N5IB

YOU'RE PAYING TOO MUCH FOR THE INTERNET!

Juno now offers FREE Internet Access!

Try it today - there's no risk! For your FREE software, visit:

<http://dl.www.juno.com/get/tagj>.

Date: Wed, 30 Aug 2000 16:53:14 -0500

From: "Rick Austin" <radio@capsales.com>

To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>

Subject: [78446] Re: Another great tool, the ESR

Message-ID: <00ae01c012cc\$b6b334c0\$9f772581@ricksnote>

MIME-Version: 1.0

Content-Type: text/plain;

charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

> The equivalent series resistance meter or ESR.

>

> The one I use was designed by Bob Parker;

> <http://www.ozemail.com.au/~bobpar/>

> Scroll down to "ESR and low Ohms meter"

> <http://www.ozemail.com.au/~bobpar/esrmeter.htm>

>

> This device is fantastic for testing caps and if

> you ever fix a TV or monitor it will pay for itself in

> the first use.

>

> For those of us in the USA the information and kits or

> assembled units are available from;

> <http://www.anatekcorp.com/>

Ditto to the above.

I had a TV which started acting up but I don't know anything about TV repair so I found the relevant FAQ at <http://www.repairfaq.org/> which had a lot of good information on the ins and outs of TV troubleshooting. Then a few polite Internet inquiries (sci.electronics.repair) yielded the fact that it was probably a leaky electrolytic in the vertical sweep circuit but no schematic was available for my unit so I had to wing it. A little further research turned up the fact that only an ESR would find a leaky cap and a guy in Australia had designed one that cost half or less of what a commercial unit would cost. I bought his ESR kit from Anatek (\$50 or so) in the US, got it working after I finally found the offending solder bridge. I then went to work on the TV, checking all the caps in the vertical section and found the leaky one. It was still capacitating but a little high on ESR, just enough to cause the screen to expand vertically by 50% or so. I replaced it at a cost of \$0.50. Case closed. The ESR awaits another problem to solve. Savings estimate: A repair shop would have charged me a minimum of \$100 if they had only charged me to fix what was actually broken. Even more expense, if I had headed over to Best Buy for a replacement TV, which would have to be a much larger screen. Right?

Rick Austin
KD5LAQ

Date: Wed, 30 Aug 2000 16:10:56 -0400
From: hattonte@gdls.com
To: qrp-1@Lehigh.EDU, ripowell@mpna.com
Subject: [78447] Ham Exams
Message-ID: <0FD9144AB9.D7BCC7CA-0N8525694B.006E7C21@gdls.com>
MIME-Version: 1.0
Content-type: text/plain; charset=us-ascii

Gents,

I just happened upon this site while searching for something else. It's the question pool for our VE friends. Some very tough questions, I thought. But good reading for the lunch break. Enjoy.

<<http://www.ve2dm.net/ricqb/advanced/advindex.html>>

de Terry W1QF

Date: Wed, 30 Aug 2000 18:12:07 -0400
From: Tom and Roxy <zikot@erie.net>
To: dlh1009@ritvax.isc.rit.edu, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [78448] Re: Manhattan Construction
Message-ID: <3.0.5.32.20000830181207.00805100@erie.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

I am in the process of designing my own miniature, 1/8", hole saw to make solder pads by making a circular cut into the board, using my Dremil tool. Presto! a isolated pad is born. The only draw back is obvious, like it or not, the pad is in that one spot. Therefore, a little more parts location planning is needed than glueing solder islands on the fly with super glue.

When I have it finished I will post how I did it to QRP-L.

73's es gud DX!

Tom & Roxanne
WA1VAI/3

At 10:16 AM 8/30/00 -0400, David Hinerman wrote:

>> One idea that I had was to use double stick carpet tape. Laminate that to
>the
>> back of the scrap circuit board you use to punch or nibble your pads from.
>> Then you'd have little peel and stick pads. Has anybody done this and if
>so
>> how did it work? Especially holding up to the heat? Don't happen to have
>the
>> tape around so I haven't tried it yet. Next run to Home Depot I thought
>I'd
>> get some. Any better suggestions for tape?
>>
>> How about other ideas or techniques to eliminate the glue? Anybody?
>
>Cla,
>
>I use the cheap gel-style glue. Sometimes it's still wet when I go to solder
>the pad, so I have to be careful not to let the pad slide away, but a couple
>moments of heat from the soldering iron seems to cause the glue to set
>faster. (Although sometimes pads do break away afterwards - either the heat
>is breaking down the glue or the backplane board isn't clean enough. By that
>time, though, there are usually enough leads attached to hold the pad in
>place anyway.) It works in a pinch.

>
>Somebody else on the list mentioned using small slivers of hot-melt glue.
>I've been meaning to try it (since my wife bought a pack of glue sticks that
>don't fit her glue gun) because you could re-position the pad by heating it.
>I never put anything in the right place the first time - I have a built-in
>excuse to modify it later.
>
>I like the carpet tape idea, although I don't know how well it would work
>for me. I use an old Radio Shack nibbler to make the pads, and I'm not sure
>if the tool is sharp enough (i.e. tight enough tolerances on the "punch" and
>"die") to punch the tape cleanly. It's still worth trying, though.
>
>Dave
>
>
>
>
>

Date: Wed, 30 Aug 2000 18:48:56 -0400
From: "David Porter" <dporter@voicenet.com>
To: <ka0gkc@arrl.net>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [78449] Re: Manhattan Construction
Message-ID: <200008302248.SAA203904@nss4.cc.lehigh.edu>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Office Max (and other places) sell Crazy Glue (R) in two different containers. One container is a "pen." This allows plopping a drop at a time and will allow the unused portion of glue to be saved.

Unfortunately, I saved some of mine too long. Sometimes it sticks sometimes it doesn't. A new dispenser pen of Crazy Glue works just fine.

Soldering the pads to the ground plane works very well, and is about as permanent as you will get. I built an RF probe that way when I couldn't find my glue pen.

David Porter
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> From: Cla KA0GKC <ka0gkc@arrl.net>
> To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>

> Subject: Manhattan Construction
> Date: Wednesday, August 30, 2000 9:17 AM
>
> Hi All,
>
> I've found that I like Manhattan Construction, it took a little getting
used
> to and if you throw a little ugly construction technique in you can
actually
> build things up pretty fast. The only thing I don't like about it is the
> glue.

<snip>
>
> How about other ideas or techniques to eliminate the glue? Anybody?
>
> ----
> 73 de KA0GKC Claton Cadmus
> ka0gkc@arrl.net
> MNQRP #1
> Minnesota QRP'ers we're looking for you!
> Email me or visit this page <http://www.qsl.net/mnqrp>
>
>

End of QRP-L Digest 1929

